

Philip S Stewart

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1328409/publications.pdf>

Version: 2024-02-01

176
papers

38,869
citations

10070

75
h-index

5622

168
g-index

179
all docs

179
docs citations

179
times ranked

33015
citing authors

#	ARTICLE	IF	CITATIONS
1	The importance of understanding the infectious microenvironment. <i>Lancet Infectious Diseases</i> , The, 2022, 22, e88-e92.	4.6	78
2	Search for a Shared Genetic or Biochemical Basis for Biofilm Tolerance to Antibiotics across Bacterial Species. <i>Antimicrobial Agents and Chemotherapy</i> , 2022, , e0002122.	1.4	3
3	Novel phenolic antimicrobials enhanced activity of iminodiacetate prodrugs against biofilm and planktonic bacteria. <i>Chemical Biology and Drug Design</i> , 2021, 97, 134-147.	1.5	4
4	Novel Nitro-Heteroaromatic Antimicrobial Agents for the Control and Eradication of Biofilm-Forming Bacteria. <i>Antibiotics</i> , 2021, 10, 855.	1.5	4
5	Delayed neutrophil recruitment allows nascent <i>Staphylococcus aureus</i> biofilm formation and immune evasion. <i>Biomaterials</i> , 2021, 275, 120775.	5.7	24
6	The impact of mental models on the treatment and research of chronic infections due to biofilms. <i>Apmis</i> , 2021, 129, 598-606.	0.9	11
7	Experimental Designs to Study the Aggregation and Colonization of Biofilms by Video Microscopy With Statistical Confidence. <i>Frontiers in Microbiology</i> , 2021, 12, 785182.	1.5	3
8	Potential biofilm control strategies for extended spaceflight missions. <i>Biofilm</i> , 2020, 2, 100026.	1.5	45
9	The zone model: A conceptual model for understanding the microenvironment of chronic wound infection. <i>Wound Repair and Regeneration</i> , 2020, 28, 593-599.	1.5	33
10	Microbial growth rates and local external mass transfer coefficients in a porous bed biofilm system measured by ¹⁹ F magnetic resonance imaging of structure, oxygen concentration, and flow velocity. <i>Biotechnology and Bioengineering</i> , 2020, 117, 1458-1469.	1.7	4
11	Risk factors for chronic biofilm-related infection associated with implanted medical devices. <i>Clinical Microbiology and Infection</i> , 2020, 26, 1034-1038.	2.8	81
12	Permeability enhancers sensitize β -lactamase-expressing Enterobacteriaceae and <i>Pseudomonas aeruginosa</i> to β -lactamase inhibitors, thereby restoring their β -lactam susceptibility. <i>International Journal of Antimicrobial Agents</i> , 2020, 56, 105986.	1.1	13
13	Sulfenate Esters of Simple Phenols Exhibit Enhanced Activity against Biofilms. <i>ACS Omega</i> , 2020, 5, 6010-6020.	1.6	6
14	Noninvasive imaging of oxygen concentration in a complex in vitro biofilm infection model using ¹⁹ F MRI: Persistence of an oxygen sink despite prolonged antibiotic therapy. <i>Magnetic Resonance in Medicine</i> , 2019, 82, 2248-2256.	1.9	9
15	Antimicrobial Activity of Naturally Occurring Phenols and Derivatives Against Biofilm and Planktonic Bacteria. <i>Frontiers in Chemistry</i> , 2019, 7, 653.	1.8	47
16	Conceptual Model of Biofilm Antibiotic Tolerance That Integrates Phenomena of Diffusion, Metabolism, Gene Expression, and Physiology. <i>Journal of Bacteriology</i> , 2019, 201, .	1.0	57
17	A permeability-increasing drug synergizes with bacterial efflux pump inhibitors and restores susceptibility to antibiotics in multi-drug resistant <i>Pseudomonas aeruginosa</i> strains. <i>Scientific Reports</i> , 2019, 9, 3452.	1.6	65
18	Measuring Antimicrobial Efficacy against Biofilms: a Meta-analysis. <i>Antimicrobial Agents and Chemotherapy</i> , 2019, 63, .	1.4	17

#	ARTICLE	IF	CITATIONS
19	Direct Microscopic Observation of Human Neutrophil-Staphylococcus aureus Interaction <i>In Vitro</i> Suggests a Potential Mechanism for Initiation of Biofilm Infection on an Implanted Medical Device. <i>Infection and Immunity</i> , 2019, 87, .	1.0	28
20	Nisin penetration and efficacy against <i>Staphylococcus aureus</i> biofilms under continuous-flow conditions. <i>Microbiology (United Kingdom)</i> , 2019, 165, 761-771.	0.7	11
21	Polynomial Accelerated Solutions to a Large Gaussian Model for Imaging Biofilms: In Theory and Finite Precision. <i>Journal of the American Statistical Association</i> , 2018, 113, 1431-1442.	1.8	5
22	Hypoxia arising from concerted oxygen consumption by neutrophils and microorganisms in biofilms. <i>Pathogens and Disease</i> , 2018, 76, .	0.8	31
23	Analysis of <i>Clostridium difficile</i> biofilms: imaging and antimicrobial treatment. <i>Journal of Antimicrobial Chemotherapy</i> , 2018, 73, 102-108.	1.3	44
24	Spatiotemporal mapping of oxygen in a microbially-impacted packed bed using ¹⁹ F Nuclear magnetic resonance oximetry. <i>Journal of Magnetic Resonance</i> , 2018, 293, 123-133.	1.2	9
25	Bacterial biofilm in acute lesions of hidradenitis suppurativa. <i>British Journal of Dermatology</i> , 2017, 176, 241-243.	1.4	19
26	<i>Propionibacterium acnes</i> biofilm is present in intervertebral discs of patients undergoing microdiscectomy. <i>PLoS ONE</i> , 2017, 12, e0174518.	1.1	81
27	Gel-Entrapped <i>Staphylococcus aureus</i> Bacteria as Models of Biofilm Infection Exhibit Growth in Dense Aggregates, Oxygen Limitation, Antibiotic Tolerance, and Heterogeneous Gene Expression. <i>Antimicrobial Agents and Chemotherapy</i> , 2016, 60, 6294-6301.	1.4	78
28	Reaction-diffusion theory explains hypoxia and heterogeneous growth within microbial biofilms associated with chronic infections. <i>Npj Biofilms and Microbiomes</i> , 2016, 2, 16012.	2.9	106
29	Microsensor and transcriptomic signatures of oxygen depletion in biofilms associated with chronic wounds. <i>Wound Repair and Regeneration</i> , 2016, 24, 373-383.	1.5	96
30	Subaerial Biofilms on Outdoor Stone Monuments: Changing the Perspective Toward an Ecological Framework. <i>BioScience</i> , 2016, 66, 285-294.	2.2	38
31	Biofilm Cohesive Strength as a Basis for Biofilm Recalcitrance: Are Bacterial Biofilms Overdesigned?. <i>Microbiology Insights</i> , 2015, 8s2, MBI.S31444.	0.9	28
32	Antimicrobial Tolerance in Biofilms. <i>Microbiology Spectrum</i> , 2015, 3, .	1.2	317
33	Prospects for Anti-Biofilm Pharmaceuticals. <i>Pharmaceuticals</i> , 2015, 8, 504-511.	1.7	32
34	Development of a Laboratory Model of a Phototroph-Heterotroph Mixed-Species Biofilm at the Stone/Air Interface. <i>Frontiers in Microbiology</i> , 2015, 6, 1251.	1.5	42
35	Biochemical Association of Metabolic Profile and Microbiome in Chronic Pressure Ulcer Wounds. <i>PLoS ONE</i> , 2015, 10, e0126735.	1.1	45
36	Contribution of Stress Responses to Antibiotic Tolerance in <i>Pseudomonas aeruginosa</i> Biofilms. <i>Antimicrobial Agents and Chemotherapy</i> , 2015, 59, 3838-3847.	1.4	115

#	ARTICLE	IF	CITATIONS
37	Antimicrobial activity of synthetic cationic peptides and lipopeptides derived from human lactoferricin against <i>Pseudomonas aeruginosa</i> planktonic cultures and biofilms. <i>BMC Microbiology</i> , 2015, 15, 137.	1.3	61
38	Biocides in Hydraulic Fracturing Fluids: A Critical Review of Their Usage, Mobility, Degradation, and Toxicity. <i>Environmental Science & Technology</i> , 2015, 49, 16-32.	4.6	317
39	Biophysics of biofilm infection. <i>Pathogens and Disease</i> , 2014, 70, 212-218.	0.8	88
40	Biofilms and Inflammation in Chronic Wounds. <i>Advances in Wound Care</i> , 2013, 2, 389-399.	2.6	296
41	Iron induces bimodal population development by <i>Escherichia coli</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 2629-2634.	3.3	102
42	Study of the effect of antimicrobial peptide mimic, CSA 13, on an established biofilm formed by <i>Pseudomonas aeruginosa</i> . <i>MicrobiologyOpen</i> , 2013, 2, 318-325.	1.2	43
43	Direct Electric Current Treatment under Physiologic Saline Conditions Kills <i>Staphylococcus epidermidis</i> Biofilms via Electrolytic Generation of Hypochlorous Acid. <i>PLoS ONE</i> , 2013, 8, e55118.	1.1	66
44	General Theory for Integrated Analysis of Growth, Gene, and Protein Expression in Biofilms. <i>PLoS ONE</i> , 2013, 8, e83626.	1.1	19
45	Heterogeneity in <i>Pseudomonas aeruginosa</i> Biofilms Includes Expression of Ribosome Hibernation Factors in the Antibiotic-Tolerant Subpopulation and Hypoxia-Induced Stress Response in the Metabolically Active Population. <i>Journal of Bacteriology</i> , 2012, 194, 2062-2073.	1.0	219
46	Identification of Peptides Derived from the Human Antimicrobial Peptide LL-37 Active against Biofilms Formed by <i>Pseudomonas aeruginosa</i> Using a Library of Truncated Fragments. <i>Antimicrobial Agents and Chemotherapy</i> , 2012, 56, 5698-5708.	1.4	101
47	Time course study of delayed wound healing in a biofilm-challenged diabetic mouse model. <i>Wound Repair and Regeneration</i> , 2012, 20, 342-352.	1.5	96
48	Mini-review: Convection around biofilms. <i>Biofouling</i> , 2012, 28, 187-198.	0.8	155
49	Phevalin (aureusimine B) Production by <i>Staphylococcus aureus</i> Biofilm and Impacts on Human Keratinocyte Gene Expression. <i>PLoS ONE</i> , 2012, 7, e40973.	1.1	30
50	Differential effects of planktonic and biofilm <i>MRSA</i> on human fibroblasts. <i>Wound Repair and Regeneration</i> , 2012, 20, 253-261.	1.5	64
51	Development and application of a polymicrobial, in vitro, wound biofilm model. <i>Journal of Applied Microbiology</i> , 2012, 112, 998-1006.	1.4	59
52	Chemical and antimicrobial treatments change the viscoelastic properties of bacterial biofilms. <i>Biofouling</i> , 2011, 27, 207-215.	0.8	72
53	Characterization and effect of biofouling on polyamide reverse osmosis and nanofiltration membrane surfaces. <i>Biofouling</i> , 2011, 27, 173-183.	0.8	35
54	In vitro efficacy of bismuth thiols against biofilms formed by bacteria isolated from human chronic wounds. <i>Journal of Applied Microbiology</i> , 2011, 111, 989-996.	1.4	53

#	ARTICLE	IF	CITATIONS
55	An in vitro model for the growth and analysis of chronic wound MRSA biofilms. <i>Journal of Applied Microbiology</i> , 2011, 111, 1275-1282.	1.4	47
56	The importance of a multifaceted approach to characterizing the microbial flora of chronic wounds. <i>Wound Repair and Regeneration</i> , 2011, 19, 532-541.	1.5	129
57	Efficacy of Zosteric Acid Sodium Salt on the Yeast Biofilm Model <i>Candida albicans</i> . <i>Microbial Ecology</i> , 2011, 62, 584-598.	1.4	44
58	<i>Staphylococcus aureus</i> Biofilm and Planktonic cultures differentially impact gene expression, mapk phosphorylation, and cytokine production in human keratinocytes. <i>BMC Microbiology</i> , 2011, 11, 143.	1.3	101
59	Hydrodynamic deformation and removal of <i>Staphylococcus epidermidis</i> biofilms treated with urea, chlorhexidine, iron chloride, or DispersinB. <i>Biotechnology and Bioengineering</i> , 2011, 108, 2968-2977.	1.7	63
60	Antimicrobial Penetration and Efficacy in an <i>In Vitro</i> Oral Biofilm Model. <i>Antimicrobial Agents and Chemotherapy</i> , 2011, 55, 3338-3344.	1.4	91
61	Assessing biofouling on polyamide reverse osmosis (RO) membrane surfaces in a laboratory system. <i>Journal of Membrane Science</i> , 2010, 349, 429-437.	4.1	51
62	Robustness analysis of culturing perturbations on <i>Escherichia coli</i> colony biofilm beta-lactam and aminoglycoside antibiotic tolerance. <i>BMC Microbiology</i> , 2010, 10, 185.	1.3	31
63	Physiology of <i>Pseudomonas aeruginosa</i> in biofilms as revealed by transcriptome analysis. <i>BMC Microbiology</i> , 2010, 10, 294.	1.3	119
64	Delayed wound healing in diabetic (db/db) mice with <i>Pseudomonas aeruginosa</i> biofilm challenge: a model for the study of chronic wounds. <i>Wound Repair and Regeneration</i> , 2010, 18, 467-477.	1.5	206
65	Characterization of a modified rotating disk reactor for the cultivation of <i>Staphylococcus epidermidis</i> biofilm. <i>Journal of Applied Microbiology</i> , 2010, 109, 2105-2117.	1.4	14
66	Spatial and Temporal Patterns of Biocide Action against <i>Staphylococcus epidermidis</i> Biofilms. <i>Antimicrobial Agents and Chemotherapy</i> , 2010, 54, 2920-2927.	1.4	116
67	Hindering biofilm formation with zosteric acid. <i>Biofouling</i> , 2010, 26, 739-752.	0.8	47
68	Testing wound dressings using an <i>in vitro</i> wound model. <i>Journal of Wound Care</i> , 2010, 19, 220-226.	0.5	73
69	Biofilm maturity studies indicate sharp debridement opens a time-dependent therapeutic window. <i>Journal of Wound Care</i> , 2010, 19, 320-328.	0.5	346
70	Diffusion of Macromolecules in Model Oral Biofilms. <i>Applied and Environmental Microbiology</i> , 2009, 75, 1750-1753.	1.4	40
71	Nanoscale Structural and Mechanical Properties of Nontypeable <i>Haemophilus influenzae</i> Biofilms. <i>Journal of Bacteriology</i> , 2009, 191, 2512-2520.	1.0	38
72	Tolerance of dormant and active cells in <i>Pseudomonas aeruginosa</i> PAO1 biofilm to antimicrobial agents. <i>Journal of Antimicrobial Chemotherapy</i> , 2009, 63, 129-135.	1.3	97

#	ARTICLE	IF	CITATIONS
73	Daptomycin Rapidly Penetrates a <i>Staphylococcus epidermidis</i> Biofilm. <i>Antimicrobial Agents and Chemotherapy</i> , 2009, 53, 3505-3507.	1.4	164
74	Secondary flow mixing due to biofilm growth in capillaries of varying dimensions. <i>Biotechnology and Bioengineering</i> , 2009, 103, 353-360.	1.7	17
75	A method for growing a biofilm under low shear at the air-liquid interface using the drip flow biofilm reactor. <i>Nature Protocols</i> , 2009, 4, 783-788.	5.5	189
76	Highlights from the Montana wound biofilm retreat. <i>Wound Repair and Regeneration</i> , 2009, 17, 626-627.	1.5	0
77	Loss of viability and induction of apoptosis in human keratinocytes exposed to <i>Staphylococcus aureus</i> biofilms in vitro. <i>Wound Repair and Regeneration</i> , 2009, 17, 690-699.	1.5	83
78	<i>Escherichia coli</i> O157:H7 Requires Colonizing Partner to Adhere and Persist in a Capillary Flow Cell. <i>Environmental Science & Technology</i> , 2009, 43, 2105-2111.	4.6	59
79	Physiological heterogeneity in biofilms. <i>Nature Reviews Microbiology</i> , 2008, 6, 199-210.	13.6	1,860
80	Biofilms in chronic wounds. <i>Wound Repair and Regeneration</i> , 2008, 16, 37-44.	1.5	1,226
81	Measurements of accumulation and displacement at the single cell cluster level in <i>Pseudomonas aeruginosa</i> biofilms. <i>Environmental Microbiology</i> , 2008, 10, 2344-2354.	1.8	15
82	Comparison of the Antimicrobial Effects of Chlorine, Silver Ion, and Tobramycin on Biofilm. <i>Antimicrobial Agents and Chemotherapy</i> , 2008, 52, 1446-1453.	1.4	174
83	Biopolymer and Water Dynamics in Microbial Biofilm Extracellular Polymeric Substance. <i>Biomacromolecules</i> , 2008, 9, 2322-2328.	2.6	33
84	Anti-biofilm properties of chitosan-coated surfaces. <i>Journal of Biomaterials Science, Polymer Edition</i> , 2008, 19, 1035-1046.	1.9	182
85	Localized Gene Expression in <i>Pseudomonas aeruginosa</i> Biofilms. <i>Applied and Environmental Microbiology</i> , 2008, 74, 4463-4471.	1.4	143
86	Direct Visualization of Spatial and Temporal Patterns of Antimicrobial Action within Model Oral Biofilms. <i>Applied and Environmental Microbiology</i> , 2008, 74, 1869-1875.	1.4	58
87	Confocal Laser Microscopy on Biofilms: Successes and Limitations. <i>Microscopy Today</i> , 2008, 16, 18-23.	0.2	6
88	Spatial Patterns of DNA Replication, Protein Synthesis, and Oxygen Concentration within Bacterial Biofilms Reveal Diverse Physiological States. <i>Journal of Bacteriology</i> , 2007, 189, 4223-4233.	1.0	278
89	A three-dimensional computer model analysis of three hypothetical biofilm detachment mechanisms. <i>Biotechnology and Bioengineering</i> , 2007, 97, 1573-1584.	1.7	64
90	High-Density Targeting of a Viral Multifunctional Nanoplatfom to a Pathogenic, Biofilm-Forming Bacterium. <i>Chemistry and Biology</i> , 2007, 14, 387-398.	6.2	58

#	ARTICLE	IF	CITATIONS
91	Observations of cell cluster hollowing in <i>Staphylococcus epidermidis</i> biofilms. <i>Letters in Applied Microbiology</i> , 2007, 44, 454-457.	1.0	21
92	The effect of the chemical, biological, and physical environment on quorum sensing in structured microbial communities. <i>Analytical and Bioanalytical Chemistry</i> , 2007, 387, 371-380.	1.9	149
93	Arginine or Nitrate Enhances Antibiotic Susceptibility of <i>Pseudomonas aeruginosa</i> in Biofilms. <i>Antimicrobial Agents and Chemotherapy</i> , 2006, 50, 382-384.	1.4	104
94	A Three-Dimensional Computer Model of Four Hypothetical Mechanisms Protecting Biofilms from Antimicrobials. <i>Applied and Environmental Microbiology</i> , 2006, 72, 2005-2013.	1.4	142
95	Removal and Inactivation of <i>Staphylococcus epidermidis</i> Biofilms by Electrolysis. <i>Applied and Environmental Microbiology</i> , 2006, 72, 6364-6366.	1.4	38
96	Engineering Approaches for the Detection and Control of Orthopaedic Biofilm Infections. <i>Clinical Orthopaedics and Related Research</i> , 2005, &NA;, 59-66.	0.7	105
97	Adaptive responses to antimicrobial agents in biofilms. <i>Environmental Microbiology</i> , 2005, 7, 1186-1191.	1.8	114
98	Biofilms strike back. <i>Nature Biotechnology</i> , 2005, 23, 1378-1379.	9.4	64
99	Magnetic resonance microscopy analysis of advective transport in a biofilm reactor. <i>Biotechnology and Bioengineering</i> , 2005, 89, 822-834.	1.7	33
100	DIFFUSION COEFFICIENT OF FLUORIDE IN DENTAL PLAQUE. <i>Journal of Dental Research</i> , 2005, 84, 1087-1088.	2.5	9
101	Rapid Diffusion of Fluorescent Tracers into <i>Staphylococcus epidermidis</i> Biofilms Visualized by Time Lapse Microscopy. <i>Antimicrobial Agents and Chemotherapy</i> , 2005, 49, 728-732.	1.4	159
102	Modelling protection from antimicrobial agents in biofilms through the formation of persister cells. <i>Microbiology (United Kingdom)</i> , 2005, 151, 75-80.	0.7	135
103	Biofilm-control strategies based on enzymic disruption of the extracellular polymeric substance matrix – a modelling study. <i>Microbiology (United Kingdom)</i> , 2005, 151, 3817-3832.	0.7	175
104	Survival strategies of infectious biofilms. <i>Trends in Microbiology</i> , 2005, 13, 34-40.	3.5	1,542
105	Ultrasonically Controlled Release of Ciprofloxacin from Self-Assembled Coatings on Poly(2-Hydroxyethyl Methacrylate) Hydrogels for <i>Pseudomonas aeruginosa</i> Biofilm Prevention. <i>Antimicrobial Agents and Chemotherapy</i> , 2005, 49, 4272-4279.	1.4	75
106	Hypothesis for the Role of Nutrient Starvation in Biofilm Detachment. <i>Applied and Environmental Microbiology</i> , 2004, 70, 7418-7425.	1.4	244
107	Oxygen Limitation Contributes to Antibiotic Tolerance of <i>Pseudomonas aeruginosa</i> in Biofilms. <i>Antimicrobial Agents and Chemotherapy</i> , 2004, 48, 2659-2664.	1.4	407
108	Stratified Growth in <i>Pseudomonas aeruginosa</i> Biofilms. <i>Applied and Environmental Microbiology</i> , 2004, 70, 6188-6196.	1.4	322

#	ARTICLE	IF	CITATIONS
109	Modeling Antibiotic Tolerance in Biofilms by Accounting for Nutrient Limitation. <i>Antimicrobial Agents and Chemotherapy</i> , 2004, 48, 48-52.	1.4	91
110	Magnetic resonance microscopy of biofilm structure and impact on transport in a capillary bioreactor. <i>Journal of Magnetic Resonance</i> , 2004, 167, 322-327.	1.2	89
111	A genetic basis for <i>Pseudomonas aeruginosa</i> biofilm antibiotic resistance. <i>Nature</i> , 2003, 426, 306-310.	13.7	1,036
112	New ways to stop biofilm infections. <i>Lancet, The</i> , 2003, 361, 97.	6.3	70
113	Pretreatment for membrane water treatment systems: a laboratory study. <i>Water Research</i> , 2003, 37, 3367-3378.	5.3	39
114	A microtiter-plate screening method for biofilm disinfection and removal. <i>Journal of Microbiological Methods</i> , 2003, 54, 269-276.	0.7	270
115	Contributions of Antibiotic Penetration, Oxygen Limitation, and Low Metabolic Activity to Tolerance of <i>Pseudomonas aeruginosa</i> Biofilms to Ciprofloxacin and Tobramycin. <i>Antimicrobial Agents and Chemotherapy</i> , 2003, 47, 317-323.	1.4	839
116	Diffusion in Biofilms. <i>Journal of Bacteriology</i> , 2003, 185, 1485-1491.	1.0	964
117	Role of Nutrient Limitation and Stationary-Phase Existence in <i>Klebsiella pneumoniae</i> Biofilm Resistance to Ampicillin and Ciprofloxacin. <i>Antimicrobial Agents and Chemotherapy</i> , 2003, 47, 1251-1256.	1.4	299
118	Transmission Electron Microscopic Study of Antibiotic Action on <i>Klebsiella pneumoniae</i> Biofilm. <i>Antimicrobial Agents and Chemotherapy</i> , 2002, 46, 2679-2683.	1.4	56
119	Penetration of Rifampin through <i>Staphylococcus epidermidis</i> Biofilms. <i>Antimicrobial Agents and Chemotherapy</i> , 2002, 46, 900-903.	1.4	174
120	Mechanisms of antibiotic resistance in bacterial biofilms. <i>International Journal of Medical Microbiology</i> , 2002, 292, 107-113.	1.5	1,094
121	Role of electrostatic interactions in cohesion of bacterial biofilms. <i>Applied Microbiology and Biotechnology</i> , 2002, 59, 718-720.	1.7	120
122	Multicellular resistance: biofilms. <i>Trends in Microbiology</i> , 2001, 9, 204.	3.5	32
123	Antibiotic resistance of bacteria in biofilms. <i>Lancet, The</i> , 2001, 358, 135-138.	6.3	3,809
124	Reduced susceptibility of thin <i>Pseudomonas aeruginosa</i> biofilms to hydrogen peroxide and monochloramine. <i>Journal of Applied Microbiology</i> , 2001, 88, 22-30.	1.4	160
125	A repeatable laboratory method for testing the efficacy of biocides against toilet bowl biofilms. <i>Journal of Applied Microbiology</i> , 2001, 91, 110-117.	1.4	32
126	Biofilm penetration and disinfection efficacy of alkaline hypochlorite and chlorosulfamates. <i>Journal of Applied Microbiology</i> , 2001, 91, 525-532.	1.4	235

#	ARTICLE	IF	CITATIONS
127	Gene expression and protein levels of the stationary phase sigma factor, RpoS, in continuously-fed <i>Pseudomonas aeruginosa</i> biofilms. <i>FEMS Microbiology Letters</i> , 2001, 199, 67-71.	0.7	59
128	Battling Biofilms. <i>Scientific American</i> , 2001, 285, 74-81.	1.0	158
129	Transport limitation of chlorine disinfection of <i>Pseudomonas aeruginosa</i> entrapped in alginate beads. <i>Biotechnology and Bioengineering</i> , 2000, 49, 93-100.	1.7	44
130	Modeling biocide action against biofilms. , 2000, 49, 445-455.		52
131	Modeling biofilm antimicrobial resistance. <i>Biotechnology and Bioengineering</i> , 2000, 68, 456-465.	1.7	59
132	Role of RpoS and AlgT in <i>Pseudomonas aeruginosa</i> biofilm resistance to hydrogen peroxide and monochloramine. <i>Journal of Applied Microbiology</i> , 2000, 88, 546-553.	1.4	76
133	Electrical enhancement of <i>Streptococcus gordonii</i> biofilm killing by gentamicin. <i>Archives of Oral Biology</i> , 2000, 45, 167-171.	0.8	34
134	Effect of Catalase on Hydrogen Peroxide Penetration into <i>Pseudomonas aeruginosa</i> Biofilms. <i>Applied and Environmental Microbiology</i> , 2000, 66, 836-838.	1.4	161
135	Biofilm resistance to antimicrobial agents. <i>Microbiology (United Kingdom)</i> , 2000, 146, 547-549.	0.7	275
136	Biofilm removal caused by chemical treatments. <i>Water Research</i> , 2000, 34, 4229-4233.	5.3	231
137	Role of Antibiotic Penetration Limitation in <i>Klebsiella pneumoniae</i> Biofilm Resistance to Ampicillin and Ciprofloxacin. <i>Antimicrobial Agents and Chemotherapy</i> , 2000, 44, 1818-1824.	1.4	811
138	Electrolytic Generation of Oxygen Partially Explains Electrical Enhancement of Tobramycin Efficacy against <i>Pseudomonas aeruginosa</i> Biofilm. <i>Antimicrobial Agents and Chemotherapy</i> , 1999, 43, 292-296.	1.4	87
139	Protective Role of Catalase in <i>Pseudomonas aeruginosa</i> Biofilm Resistance to Hydrogen Peroxide. <i>Applied and Environmental Microbiology</i> , 1999, 65, 4594-4600.	1.4	218
140	[49] Enhanced bacterial biofilm control using electromagnetic fields in combination with antibiotics. <i>Methods in Enzymology</i> , 1999, 310, 656-670.	0.4	44
141	Reduction of polysaccharide production in <i>Pseudomonas aeruginosa</i> biofilms by bismuth dimercaprol (BisBAL) treatment. <i>Journal of Antimicrobial Chemotherapy</i> , 1999, 44, 601-605.	1.3	50
142	Quorum sensing in <i>Pseudomonas aeruginosa</i> controls expression of catalase and superoxide dismutase genes and mediates biofilm susceptibility to hydrogen peroxide. <i>Molecular Microbiology</i> , 1999, 34, 1082-1093.	1.2	379
143	Bacterial Biofilms: A Common Cause of Persistent Infections. <i>Science</i> , 1999, 284, 1318-1322.	6.0	10,329
144	[13] Fluorescent probes applied to physiological characterization of bacterial biofilms. <i>Methods in Enzymology</i> , 1999, 310, 166-178.	0.4	17

#	ARTICLE	IF	CITATIONS
145	A review of experimental measurements of effective diffusive permeabilities and effective diffusion coefficients in biofilms. , 1998, 59, 261-272.		264
146	Analysis of biocide transport limitation in an artificial biofilm system. Journal of Applied Microbiology, 1998, 85, 495-500.	1.4	85
147	Color measurement as a means of quantifying surface biofouling. Journal of Microbiological Methods, 1998, 34, 143-149.	0.7	11
148	Bacterial characterization of toilet bowl biofilm. Biofouling, 1998, 13, 19-30.	0.8	13
149	Spatial Physiological Heterogeneity in <i>Pseudomonas aeruginosa</i> Biofilm Is Determined by Oxygen Availability. Applied and Environmental Microbiology, 1998, 64, 4035-4039.	1.4	448
150	Spatial Patterns of Alkaline Phosphatase Expression within Bacterial Colonies and Biofilms in Response to Phosphate Starvation. Applied and Environmental Microbiology, 1998, 64, 1526-1531.	1.4	146
151	Spatial Distribution and Coexistence of <i>Klebsiella pneumoniae</i> and <i>Pseudomonas aeruginosa</i> in Biofilms. Microbial Ecology, 1997, 33, 2-10.	1.4	80
152	Evidence of bacterial adaptation to monochloramine in <i>Pseudomonas aeruginosa</i> biofilms and evaluation of biocide action model. , 1997, 56, 201-209.		41
153	Chlorine Penetration into Artificial Biofilm Is Limited by a Reaction~Diffusion Interaction. Environmental Science & Technology, 1996, 30, 2078-2083.	4.6	161
154	Control of microbial souring by nitrate, nitrite or glutaraldehyde injection in a sandstone column. Journal of Industrial Microbiology, 1996, 17, 128-136.	0.9	104
155	Effects of ultrasonic treatment on the efficacy of gentamicin against established <i>Pseudomonas aeruginosa</i> biofilms. Colloids and Surfaces B: Biointerfaces, 1996, 6, 235-242.	2.5	19
156	Spatial Variations in Growth Rate within <i>Klebsiella pneumoniae</i> Colonies and Biofilm. Biotechnology Progress, 1996, 12, 316-321.	1.3	155
157	Evaluation of physiological staining, cryoembedding and autofluorescence quenching techniques on fouling biofilms. Biofouling, 1996, 9, 269-277.	0.8	13
158	Transport limitation of chlorine disinfection of <i>Pseudomonas aeruginosa</i> entrapped in alginate beads. , 1996, 49, 93.		29
159	Quantitative analysis of biofilm thickness variability. Biotechnology and Bioengineering, 1995, 45, 503-510.	1.7	129
160	Biofilm parameters influencing biocide efficacy. Biotechnology and Bioengineering, 1995, 46, 553-560.	1.7	62
161	Implications of reaction-diffusion theory for the disinfection of microbial biofilms by reactive antimicrobial agents. Chemical Engineering Science, 1995, 50, 3099-3104.	1.9	69
162	Engineering scale-up of in situ bioremediation processes: a review. Journal of Contaminant Hydrology, 1995, 19, 171-203.	1.6	104

#	ARTICLE	IF	CITATIONS
163	Physiological assessment of bacteria using fluorochromes. <i>Journal of Microbiological Methods</i> , 1995, 21, 1-13.	0.7	143
164	Biofilm structural heterogeneity visualized by three microscopic methods. <i>Water Research</i> , 1995, 29, 2006-2009.	5.3	95
165	Cryosectioning of biofilms for microscopic examination. <i>Biofouling</i> , 1994, 8, 85-91.	0.8	45
166	Biofilm accumulation model that predicts antibiotic resistance of <i>Pseudomonas aeruginosa</i> biofilms. <i>Antimicrobial Agents and Chemotherapy</i> , 1994, 38, 1052-1058.	1.4	130
167	A model of biofilm detachment. <i>Biotechnology and Bioengineering</i> , 1993, 41, 111-117.	1.7	154
168	Transport of 1- μ m latex particles in <i>Pseudomonas aeruginosa</i> biofilms. <i>Biotechnology and Bioengineering</i> , 1993, 42, 111-117.	1.7	61
169	Interactions of 1 $\frac{1}{4}$ μ m latex particles with <i>Pseudomonas aeruginosa</i> biofilms. <i>Water Research</i> , 1993, 27, 1119-1126.	5.3	50
170	Effects of various metal substrata on accumulation of <i>Pseudomonas aeruginosa</i> biofilms and the efficacy of monochloramine as a biocide. <i>Biofouling</i> , 1993, 7, 241-251.	0.8	22
171	Biodegradation rates of crude oil in seawater. <i>Water Environment Research</i> , 1993, 65, 845-848.	1.3	18
172	Characterization of immobilized cell growth rates using autoradiography. <i>Biotechnology and Bioengineering</i> , 1991, 37, 824-833.	1.7	19
173	Microbial growth in a fixed volume: studies with entrapped <i>Escherichia coli</i> . <i>Applied Microbiology and Biotechnology</i> , 1989, 30, 34.	1.7	29
174	Biofilms and Device-Related Infections. , 0, , 423-439.		21
175	Antimicrobial Tolerance in Biofilms. , 0, , 269-285.		17
176	A review of experimental measurements of effective diffusive permeabilities and effective diffusion coefficients in biofilms. , 0, .		1